



# Project Approval Form

Please complete pages 1-2 of this form and the page(s) specific to your projects.

- Review the Project Requirements boxes on each project page for guidance on design and installation requirements.
- City of Kirkland staff will contact you with project approval within 2 weeks. Approval may include required changes to the plan that ensure your project meets qualifications.
- **Projects that are installed without completed and approved project approval forms will not receive a rebate.**

## Contact Information

Name \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

Project Address \_\_\_\_\_

This form is being submitted for the following project(s) *(check all that apply)*:

- Native landscaping - *page 3*
- Cisterns - *page 7*
- Rain garden - *page 9*



**Send signed and completed form to:**

[YardSmart@kirklandwa.gov](mailto:YardSmart@kirklandwa.gov)

-or-

Aaron Hussmann  
City of Kirkland  
123 5<sup>th</sup> Ave  
Kirkland, WA 98033



## Native Landscaping

### **Project Requirements**

#### **Location**

- Must be combined with disconnecting minimum 400 square feet (800 sf for non-single family residential) of roof area or other impervious surface from City stormwater drainage system. Note: Max of 700sf per downspout unless approved by City.
  - Landscaping must be in flow path of newly disconnected area.
- Landscaping area must be at least 20% of the size of impervious area draining to the landscaping (i.e. Draining 400 square feet of roof area requires 80 square of new native landscaping).
- On private property, outside of the public right of way (exceptions made on a case-by-case basis and may require additional permits).
- Call 811 for utility locates before you dig.
- Locate trees and shrubs 10' from known underground utilities, 10' from buildings, 10' from property lines, 30' from corner curb, 20' from streetlights and other trees
- Trees planted under power lines must be less than 25' tall at maturity
- Project must not send water onto a neighbor's property

#### **Design/Installation**

- Native landscaping must replace lawn, weeds, extremely compacted soil, or pavement
- Lawn replacement requires either removal of or killing the grass (e.g. cardboard over a winter will kill most lawns) prior to tilling and amending soil
- Replacing pavement requires pavement and gravel removal, and then tilling and amending soil
- Minimum of 50% plant material native to the Pacific Northwest region (cultivars are acceptable). 50% of plants can be non-native but must not be invasive species
- Plant selection is appropriate for site conditions (sunny/shady, wet/dry, etc.)
- Recommended planting density
  - Trees – 15 to 20 feet on center
  - Shrubs – 6 to 8 feet on center
  - Groundcover – 3 to 4 feet on center
- Scarify or till extremely compacted soils to a depth of 12 inches
- Dig 1-3 inches of compost into the top 5 inches of soil in the planting area
- Finish with a 3-inch plant-based mulch layer (arborists wood chips or equivalent)
- Do not use landscape fabric or plastic sheeting as a weed barrier**

#### **Formal City of Kirkland approval required**

## Native Landscaping

a) Who will be conducting this work?	<input type="radio"/> Property Owner <input type="radio"/> Contractor
b) Project Installer & contact info?	

### Site Details

c) What kind of surface will your native landscape replace?	<input type="radio"/> Lawn <input type="radio"/> Bare Soil	<input type="radio"/> Pavement <input type="radio"/> Invasive Plants
d) Will the landscape receive runoff from a roof or impervious surface that will be disconnected from the City stormwater drainage system?	<input type="radio"/> Yes	<input type="radio"/> No
e) If yes, how many square feet of roof area or impervious surface will flow to landscaping?	_____ square feet	700 sf max per downspout unless approved by City

### Sizing Details

f) Size of native landscaping project area?	_____ square feet	Minimum 20% of impervious area (i.e. 400 sf of roof area requires 80 square feet of native landscaping)
g) Amount of <b>compost</b> needed	_____ cubic yards	Minimum 1-3 inch depth Multiply project area by planned compost depth. Divide result by 324
h) Amount of <b>mulch</b> needed	_____ cubic yards	Minimum 3-inch depth Multiply project area by planned mulch depth. Divide result by 324

### Required Supporting Documents

- 2-3 “before” images of your landscape area
- Plant List (page 5)
- Site design plan (page 6)



### Native Landscaping: Site Design Plan

Include:

- Dimensions of native landscaping
- Distance from any structures
- Location descriptors (i.e. front, back, side yard)
- Planting plan (include plant species and plant locations)

A large grid for site design plan, consisting of 20 columns and 20 rows of squares. The grid is intended for drawing a site design plan for native landscaping.

Scale drawing to: 1/4 in = 1ft **OR** 1/8 in = 1 ft **OR** 1 in = 10 ft

## Cisterns

### **Project Requirements**

Water can be used for irrigation only (i.e. not drinking water)

#### **Location**

- On private property, outside of the public right of way
- At least 5 feet from property line
- Above ground
- Cisterns must be installed on a solid, level concrete pad or other surface that will not allow the cistern to sink or tip
- Overflow drains onto a pervious surface (grass, garden, rain garden, etc.)
- Overflow drainage outlet directed a minimum of 5 feet away from foundation
- Project does not send water onto neighbor's property

#### **Design**

- Cistern must drain a minimum roof area of 400 square feet.
  - Roof area must be newly disconnected from City stormwater drainage system
- Cistern size: 200 to 1,000 gallons
- Secure lid
- Drain valve at bottom of tank for releasing water slowly – valve must remain open during the "wet season" months of October-May
- Overflow with pipe that drains onto a pervious surface (grass, garden, etc.)
- Clear access for clearing the inlets when necessary

**Formal City of Kirkland approval required**

## Cisterns

a) Who will be conducting this work?	<input type="radio"/> Property Owner <input type="radio"/> Contractor
b) Project Installer & contact info?	

### System Specifications

c) What is the capacity of the cistern(s)?	_____ gallons	At least 200 gallons
d) What is the size of roof area draining to cistern(s)?	_____ square feet	Minimum 400 square feet
e) What material will be used for the cistern foundation?	_____	Concrete pad, packed earth or sand, etc.
f) Size of foundation?	_____ square feet	
g) Describe filtration system components		
h) Where will cistern's overflow be directed to?		Direct a minimum 5 feet away from foundation

### Required Supporting Documents

- An image of the cistern (e.g. an image from a website)
- Sketch indicating proposed location of cistern, in relation to buildings and other structures



## Rain Gardens

### **Project Requirements:**

#### Location

- Call 811 for utility locates before you dig. Do not locate garden above utilities
- Installed in location which passes a soil drainage test
  - 1 to 2 inches per hour is preferred, 0.5 inches per hour minimum
- Garden located on a slope not greater than 10% (a 1 foot drop over 10 feet length)
- Minimum setback of 10 feet from top of rain garden to buildings, 10 feet from utilities, and 5 feet from property lines. Minimum setback of 15 feet from buildings with crawl space or basement elevation that are below the overflow point of the infiltration system
- Minimum setback of 50 feet from any slope greater than 20%
- Do not locate immediately upslope of buildings
- Locate on private property, outside of the public right of way

#### Design/Installation

- Lawn replacement requires either removal of or killing the grass (e.g. cardboard over a winter will kill most lawns) prior to tilling and amending soil
- Replacing pavement requires pavement and gravel removal, and then tilling and amending soil
- Rain garden is designed per the latest *Rain Garden Handbook for Western Washington*
- Rain garden must drain a minimum of 400 square feet or 800 square feet for multifamily or non-residential property
- Never send more than 1,000 square feet of roof or driveway runoff to a single rain garden
- Garden ponding area is 6 to 12 inches deep
- 4 inches of amended soil tilled into upper 12 inches of soil or 12 inches of 60% sand, 40% compost blend
- Maximum bottom slope of garden is 0.5%
- Minimum 1-foot depth between bottom of bioretention soil mix and water table
- No invasive plant species
- Plants selection is appropriate for site conditions and placed in appropriate zones of rain garden
- Install streambed cobble at inlet and overflow to dissipate runoff
- Finished with a plant-based mulch layer of 3"
- Do not use landscape fabric or plastic sheeting as weed barrier**

### **Formal City of Kirkland approval required**

## Rain Gardens

Who will be conducting this work?	<input type="radio"/> Property Owner <input type="radio"/> Contractor
Landscape Designer & contact info?	_____
Project Installer & contact info?	_____

### Site Details

- What kind of surface will your rain garden replace? (*choose one*)
- Lawn                       Pavement                       Bare Soil                       Invasive Plants

### Sizing Summary

Refer to *Rain Garden Handbook for Western Washington* to complete this section

Sizing Calculations		
A. Soil drainage rate	_____ inches per hour	Use results of soil drainage test
B. Area draining to rain garden	_____ square feet	See pages 18-19 of Handbook
C. Desired ponding depth	_____ inches	Designer's preference (6" or 12")
D. Desired performance level	<b>BEST</b>	
E. Rainfall region	<b>Region 2</b>	See map on page 22 of Handbook
F. Sizing factor	_____ %	Use sizing chart on page 21 of Handbook
G. Soil texture	_____	Sand, silt or clay?
Results/ Rain Garden Dimensions		
Required size of top surface of ponding area	_____ square feet	Multiply area draining to garden (B) by sizing factor (F)
Design dimensions for top surface of ponding area	____' Width X ____' <b>Length</b>	Dimension that fit in available space & based on designer preference
Overflow containment area	____' Width X ____' <b>Length</b>	Calculated by adding 1 foot horizontal to all sides for the 6-inch vertical depth required on a 2:1 slope. See page 24 of Handbook

### Rain Garden Inlet

- How will water be delivered to your rain garden?
- Pipe                       Cistern                       Swale                       Other \_\_\_\_\_

## Rain Gardens

### Soil Amendments

Amount of rain garden soil mix needed	_____ cubic yards	4-inch or 12-inch depth Multiply top surface of ponding area by proposed soil depth. Divide result by 324
Amount of mulch needed	_____ cubic yards	3-inch depth Multiply top surface of ponding area by proposed mulch depth. Divide result by 324

### Required Supporting Documents

- 2-3 “before” images of your rain garden area
- Plant List (page 12)
- Site Design Plan (page 13)



**Rain Gardens: Site Design Plan**

Include:

- dimensions of the rain garden
- distance from any structures
- location descriptors (i.e. front, back, side yard)
- location of inlet and overflow of garden and how water will be conveyed to the garden
- planting plan (include plant species and plant locations)

A large grid for site design plan, consisting of 20 columns and 20 rows of squares. The grid is intended for drawing a site design plan for a rain garden.

Scale drawing to: 1/4 in = 1ft OR 1/8 in = 1 ft OR 1 in = 10 ft